



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/045,118

03/20/1998

KOUSUKE SUZUKI

980268

9451

23850

7590

04/07/2003

ARMSTRONG, WESTERMAN & HATTORI, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

BEREZNY, NEAL

ART UNIT

PAPER NUMBER

2823

DATE MAILED: 04/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/045,118

Applicant(s)

SUZUKI ET AL.

Examiner

Neal Berezny

Art Unit

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29, 31, 33-35, 37-39, 41 and 42 is/are pending in the application.
- 4a) Of the above claim(s) 1-27 and 42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28, 29, 31, 33-35, 37-39 and 41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 1998 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 15 April 2002 is: a) ☐ approved b) ☒ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 4/15/02, paper 23, 2/14/01, paper 20, and 6/7/00, paper 11 have been disapproved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 4/15/02, 2/14/01, and 6/7/00 have been disapproved because they introduce new matter into the drawings. 37 CFR 1.121(a)(6) states that no amendment may introduce new matter into the disclosure of an application. The original disclosure does not support the showing of the following;

A. Fig. 3 and 4, the change from N_2O to H_2O is not completely supported by the original specification, since the original specifications, p.15, discusses the use of N_2O as a source gas, it is conceivable that the figures were intending to also show residual source gases. Note that the correction and its support are required to be void of any ambiguity.

B. Fig.3-13, contain new matter because the terms Q and Pm are removed, as well as one of the vertical axis, and the vertical axis is now defined that as the "partial pressure of released species in Torr". Applicant asserts that these terms are well understood in the art and "the specifications clearly states that the vertical axis represents the partial pressure of the released species in terms of Torr." Examiner requests that applicant specifically cite where in the original specifications such a

statement is made. Further, examiner requests, again for a second time, that applicant provide references or evidence to show that the terms Q and Pm are notoriously well known in the art and need not be described in the specifications. Further, applicant's highlighting of the "relevant" sections of the plots fails to have support in the original specifications nor does it necessarily clarify the uncertainties in the drawings. Recall that the corrections and their support are required to be void of any ambiguity.

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the principle of the present invention, as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Figs. 3-14 are replete with errors, contradictions, and vague, indefinite, and incomplete information. As an example, but by no means a complete list, the following are provided:

A. The terms Q and Pm have not been defined nor described in either the drawing or the specifications.

B. Figs. 3 and 4 refer to different features that are inconsistent with the original specification. See p.15, ln.24-29, where reference is made to 200⁰C and H₂O, which is not found in the drawings.

C. Many of the plot lines are not labeled, and those that are labeled, it is not clear which of the lines that cross and overlap, are continuations of the labeled lines and which are not.

Correction is required.

Specification

3. A substitute specification excluding the claims is required pursuant to 37 CFR 1.125(a) because the numerous changes required by applicant leads to extensive work on the part of the office and could lead to errors in the printing of the patent.
4. A substitute specification filed under 37 CFR 1.125(a) must only contain subject matter from the original specification and any previously entered amendment under 37 CFR 1.121. If the substitute specification contains additional subject matter not of record, the substitute specification must be filed under 37 CFR 1.125(b) and must be accompanied by: 1) a statement that the substitute specification contains no new matter; and 2) a marked-up copy showing the amendments to be made via the substitute specification relative to the specification at the time the substitute specification is filed.

Response to Amendment

5. The amendment filed 4/15/02 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

A. P.16, ln.4-5, the ratio of N₂O to H₂O was changed to the ratio of N₂O to SiH₄. Applicant asserts that no new matter was introduced because SiH₄ was cited as a source gas. Examiner does not construe this as sufficient support because such

support for a correction is required to be void of any ambiguity. It is possible that other source gases could have been intended, and/or that since H₂O in the oxide is germane to applicant's invention, that perhaps applicant's ratio was concerned with the H₂O in the source gas.

B. P. 15, ln. 27, plasma power of 200C was changed to 200 W. Applicant citing in the specifications to support the change depends on identifying a phrase with the same expression as the amendment. Examiner does not construe this as sufficient support because such support for a correction is required to be void of any ambiguity. Since both the amendment paragraph and the citing used for support both heating and temperatures, the error could be in the word "of", with the correct word being "at", indicating the process was at conventional power and at 200⁰C. Further, applicant's new matter statement needs to find support in the **original** specifications and not the **present** specifications. See p.7, ln.14 &16, of the response.

C. P.16, ln.15, H₂ was changed to H₂O. Applicant merely asserts that this correction is obvious from the specifications, but fails to cite any support. Applicant's statements are conclusory and not persuasive in the absence of supporting rationale. Further, H₂ gas in oxides is a major concern in the art and the rest of the sentence refers to Si-H bonds in the oxide.

D. P.17, ln.15, Fig.10 has been changed to Fig.8, and applicant provides no support from the original specifications. In the previous amendment the change was from Fig.10 to Fig.9 and now Fig.8.

E. P.27, ln.15, and p.20, ln.12, were amended from 50kW to 50W.

Applicant's citing refers to the "possibility" of setting the high-frequency power to less than 100 W. Examiner does not construe this as sufficient support because such support for a correction is required to be void of any ambiguity. The citing was before the amended text and referred to a generalized discussion, whereas the amended text describe specific embodiments, and the alleged error occurs in two locations. It is not clear which one was in error.

F. Replacement paragraph beginning at p.16, ln.27, applicant changed Fig.5 to Fig.4 in amendment D, dated 3/1/01, paper #19, which lacks support in the specifications. It is not clear why the power levels needed to be identical or why other parameters were not being considered.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 28, 29, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in combination with Toyotaka (JP 07135208 A) and Oda (JP 6-204420 A). AAPA forms a semiconductor device with

a substrate, fig.1c, el.1, gate electrode, el.3a, diffusion region, el.1A and 1B, sidewall insulator, fig.1d, el.3a and 3b, self-aligned contact hole, fig.1h, el.1c and 1d, first insulator, fig.2, el.6, second insulator, el.4, interlayer insulator, fig.1f, el.5, and contact hole in interlayer insulator and through first and second insulators, fig.1g, el.5a and 5b.

A conductive pattern is necessarily formed in the contact hole to make contact to the devices so that they can be used in an electronic circuit. AAPA does not teach the reduced water content in the first oxide. Toyotaka teaches forming an insulating film with removed H₂O. It would be obvious to one skilled in the art to combine the teachings of Toyotaka with AAPA and remove water from the gate oxide region to reduce the level of interfacial states and increase the device's resistance to the hot electron effect. Further, Oda teaches the well-known art of forming silicide contacts in both the source/drain regions and on the gate electrode. It would be obvious to make silicide contacts to the source and drain since that would reduce the contact resistance of the device and improve performance, as taught by Oda, see bottom of translated abstract.

8. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA, Toyotaka and Oda as applied to claims 28, 29, and 33 above, and further in view of Lage et al. (5,485,420). The combinations of AAPA, Toyotaka and Oda appear not to specifically show the formation of the interconnect structure that electrically connects to the latched gates. Lage teaches forming self-aligned contacts consisting of a conductor pattern, fig.9, el.62, contacting a diffusion region, el.81, and a gate electrode, el.79,

such that the conductor extends along a surface of the spacer, el.52. It would be obvious to one of ordinary skill in the art to build the circuits of the AAPA, Toyotaka and Oda combination to have latched gates by forming the interconnect structure of Lage in order to reduce the number of process steps by connecting the gate with the source or drain and also contacting the source, drain, and gate in a single layer/step, thereby building a well known and useful circuit type to be used in larger circuits.

9. Claims 34, 37, 38, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA, in combination with Wolf, Vol.2, p.194-198 and Oda (JP 6-204420 A). AAPA forms a semiconductor device with a substrate, fig.1c, el.1, gate electrode, el.3a, diffusion region, el.1A and 1B, sidewall insulator, fig.1d, el.3a and 3b, self-aligned contact hole, fig.1h, el.1c and 1d, first insulator, fig.2, el.6, second insulator, el.4, interlayer insulator, fig.1f, el.5, and contact hole in interlayer insulator and through first and second insulators, fig.1g, el.5a and 5b. A conductive pattern is necessarily formed in the contact hole to make contact to the devices so that they can be used in an electronic circuit. AAPA does not teach the use of B and/or P to act as a gettering agent in order to reduced water content in the first oxide. Wolf, p.196, teaches forming an insulating film with B and P at 3-5 wt% each, in order to act as a gettering agent to remove contaminants, such as H₂O, from sensitive areas. It would be obvious to one skilled in the art to combine the teachings of Wolf with AAPA and use B and P as gettering agents to remove water from the gate oxide region to reduce the level of interfacial states and increase the device's resistance to the hot electron effect. Further,

Oda teaches the well known art of forming silicide contacts in both the source/drain regions and on the gate electrode. It would be obvious to make silicide contacts on the source and drain regions since that would reduce the contact resistance of the device and improve performance, as taught by Oda, see bottom of translated abstract.

10. Claims 35 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA, Wolf, and Oda as applied to claims 34, 37, 38, and 41 above, and further in view of Lage et al. (5,485,420). The combinations of AAPA, Wolf, and Oda appear not to specifically show the formation of the interconnect structure that electrically connects to the latched gates. Lage teaches forming self-aligned contacts consisting of a conductor pattern, fig.9, el.62, contacting a diffusion region, el.81, and a gate electrode, el.79, such that the conductor extends along a surface of the spacer, el.52. It would be obvious to one of ordinary skill in the art to build the circuits of the AAPA, Wolf, and Oda combination to have latched gates by forming the interconnect structure of Lage in order to reduce the number of process steps by connecting the gate with the source or drain and also contacting the source, drain, and gate in a single layer/step, thereby building a well known and useful circuit type to be used in larger circuits.

Response to Arguments

11. Applicant's arguments filed 12/30/02 have been fully considered but they are not persuasive. The drawings, summary, and entire specifications are objected to. All pending claims under consideration stand rejected under 35 USC 103.

12. Applicant continues to refer to amendment E, paper #25, dated 4/15/02, as being dated 2/15/02, asserting examiner has made a typographical error. This amendment was dated by applicant 4/15/02, received in the office on 4/17/02, and entered 5/28/02. There is nothing in the record to indicate a 2/15/02 amendment. Applicant's continued use of the 2/15/02 serves to add additional confusion to the record. Applicant is required to provide documentary proof of an amendment dated 2/15/02, so the record could be reconciled. Applicant is warned that failure to provide such evidence and continued use of the 2/15/02 date in the next response would be construed as deliberately non-responsive.

13. Applicant has not provided a substitute specification and states that, if necessary, a substitute specification would be provided upon identifications of allowable subject matter. Applicant is required to provide a substitute specification in the next response. Applicant is warned that failure to provide a substitute specification in the next response would be construed as deliberately non-responsive. The burden to the office is not limited to the printer, but also includes a burden to the examination of the application. The specifications are replete with errors and new matter issues, which sometimes involve amended material.

14. Applicant's arguments regarding new matter issues are not convincing because they present arguments that assert that these changes "could" be supported by the

original specifications. Applicant has the burden to demonstrate that no other reasonable interpretation of the specifications exist, and therefore the amendment does not, nor could not, change the scope of the original specifications. Such support in the specifications, which is void of any ambiguity, is not provided by the applicant.

Applicant repeatedly argues that examiner's interpretation contradicts the bulk of the specifications, but such an assertion, even if true, does not provide support void of ambiguity. Applicant asserts that these are typographical errors that the bulk of the specifications supports, thus providing one meaning. Although, with another set of typographical errors, which the bulk of the specifications could also support, could result in a significantly different meaning. Numerous meanings could be derived from the specifications dependent upon the set of typographical errors selected. Applicant is reminded that each inventor has signed an oath stating that they have read and understood the specifications. Applicant has the burden to insure the accuracy of the specifications and is prohibited from modifying the scope of the specifications.

15. Many of applicant's errors are circular, in that the correction of one error becomes the basis for support for another correction. For example, in fig.3 and 4, applicant changes N_2O to H_2O , then in applicant's arguments regarding the new matter issue related to p.16, ln.4-5, where the ratio of N_2O to H_2O was changed to the ratio of N_2O to SiH_4 , applicant uses figures 3 and 4, as amended, to provide support for the second set of changes. Further, applicant asserts that the difference between typing H_2O and typing SiH_4 is clearly a typographical error. Typographic errors typically

involve one or two simple key strokes, and not complex key strokes creating two very different compounds.

16. Another example of circular errors and estoppel relates to applicant's assertion that Q and Pm are notoriously well known in the art and need not be described in the specifications. Allegedly Q and Pm relate to the H₂O and OH released from the oxide film, see bottom of p.2 of the response, yet applicant argues in page 12 of the response that Wolf's removal H₂O from an oxide does not suggest the simultaneous removal of OH from the oxide.

17. Still another example of estoppel relates to applicant's arguments regarding overlapping plot lines, where applicant states on the top of page 4 that this material is **not** essential for a proper understanding of the invention, yet the original specifications state on p.14, ln.1-21, that these figures show the principles of the invention, and again in the middle of p.4 of the response, applicant states that H₂O and OH content is essential for a proper understanding of the invention. Note also the fig.3 and 4, which include a change from N₂O, is again referred to in another new matter issue.

18. Applicant's argument regarding p.15, ln.27 is not convincing. Applicant argues that examiner's alternate interpretation contradicts the change on p.15, ln.24-29. Again applicant cannot ~~claim~~^{show} support from the amended specifications but only from the original specifications. Examiner is not disputing that applicant's interpretation is not possible, the issue is that the correction and its support is required to be void of any ambiguity. The following sentence could merely be following up on the previous temperature statement.

19. Applicant argues that the new matter issue on p.16, ln.25 contradicts the context for the change and the bulk of the specifications. Again the bulk of the specifications is not well defined because of its numerous errors and contradictions, and therefore an argument dependent on ambiguous specifications fails to remove all ambiguity from the changes proposed. Recall that the original fig.3 and 4, referred to N_2O , but that too is an error. How can we be sure that fig.7 is not in error also and that p.16, ln.15 is correct? Recall also that on p.17, ln.15, fig.10 was changed to fig.9 and then again to fig.8, in which applicant asserts that the bulk of the specifications supports the proposed change. How can the "bulk of the specifications" clearly provide support for both changes of the same "error"? Applicant asserts that p.17, ln.15-16 refers to a reflective index of 1.63, thus clearly supporting the change to fig.8, but it is not clear that the specifications cited is actually referring to fig.8, it could refer fig.13. Further, there is nothing to preclude fig.9 or 10 from having a RI=1.63. Applicant could just as easily have argued than fig.9 or 10 was in error and should include RI=1.63, and that the error on page 17, ln.15, was not an error.

20. Regarding replacement paragraph at p.16, ln.27, applicant's original specifications stated the power level to be 200W, which was later changed to 2000W, and now back to 200W. With this in mind, applicant argues that the changes on p.20, ln.15 and p.27, ln.12, are due to a typographical error and contradict the bulk of the specifications. Given that this typo error occurs in more than one location in the specifications, in applicant's amendment, and the specifications are replete with errors and contradictions, one cannot say that the specifications are void of ambiguity. Again,

with so many errors one could have easily asserted that the original specifications had an error and should read less than 100kW, and one could still find support for that error also.

21. Regarding the issue of the change from fig.5 to fig.4, in par. at p.16, ln.27, applicant's arguments are not devoid of ambiguity. Applicant argues that the power levels in both figures must be the same, but it is not clear why the power levels need to be the same or why no other parameters are at issue.

22. Applicant traverses Examiner's 103 rejections on the grounds that the motivation statement is defective because Wolf allegedly does not specifically identify OH charge traps. Examiner cannot find such a statement in the rejection. The rejection includes a motivation statement that refers to reducing water to reduce interfacial states to increase the resistance to the hot electron effect. Although, it is well known that water dissociates and creates OH charge traps, there is no need to prove this, since applicant does not claim this feature, nor is the combination required to have the same motivations as applicant. Applicant's arguments are based on examiner's response to applicant's previous response, which are repeated for completeness.

23. Applicant's argument that the alleged absence of motivation to combine on the grounds that applicant has identified a specific problem allegedly not taught in the prior art of record, is incorrect because the cited textbook by Wolf, clearly teaches the broader problem and solution of reducing H₂O in all oxides in order to reduce OH charge traps. Applicant's assertion of an allegedly unique discovery is not of OH charge

traps induced by H₂O contamination, but of a specific situation in which H₂O contamination induces OH charge traps. The fact that applicant has recognized another specific advantage which would flow naturally from following the broader, more general suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). In this case, Wolf provides the motivation to combine the teachings by pointing out on p.195, table 4.4, property 5 and 18, that a good oxide should not absorb or permeate moisture, in order to reduce charge trap densities, and reduce outgasing. Both Toyotaka and Wolf teach that these qualities of an oxide are desirable and such oxides should be used for general applications. One of ordinary skill in the art would find it obvious to use quality oxides in general, and would therefore use such an oxide for the first oxide. The fact that applicant had discovered a specific application to apply the broader and more general teachings of the prior art to reduce H₂O contamination in all oxides to just one specific oxide cannot by itself be the sole basis for patentability. In conclusion, the broader problem with the broader solution as taught to apply to all oxides, would also solve applicant's narrower problem, regardless of whether or not the skilled artisan was ever even aware of applicant's discovered narrower problem.

24. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was

within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

CONCLUSION

25. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neal Berezny whose telephone number is (703) 305-1481. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on (703) 306-2794. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

Application/Control Number: 09/045,118

Page 17


Art Unit: 2823

308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

NB

April 4, 2003


Chik Chandhuri
Supervisory Patent Examiner
Technology Center 2800